



Inspire Smart Digital Lifestyle!



Consumer Product Guide

- Turn Your Living Room into a Home Theater
- Organize Your Multimedia at Your Fingertips
- Enjoy Music in Every Room
- Have Fun Wherever You Are





Eco-Friendly. We Do More.

More than just being a manufacturer with “green” in mind, ZyXEL commits itself to be the world’s leading total access solution provider while doing its best for the environment by developing eco-friendly products. ZyXEL provides customers with a full range of reliable end-to-end networking solutions that are not only easy-to-use, but also cost-effective, energy-efficient and environment-friendly. With the most needed technologies integrated into one device, ZyXEL solutions bring smart, convenient and efficient digital lifestyle to our valued customers for less time and energy.

With smart plug-and-play design, ZyXEL’s products simplify the process of building home multimedia networks and fit perfectly into every home. Through the user-friendly interface and easy-to-use one-touch button, users can easily customize network setting to meet personal needs. And the intelligent energy-saving mechanism of ZyXEL products also helps reduce energy waste and protect our environment.

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3

Relax Leisurely

Enjoy Music in Every Room

With ZyXEL's wireless connectivity products, you can enjoy your favorite music everywhere in the home. Use your iPod or notebook as a portable media player indoors or outdoors, and access Internet radio stations or music stored on the Network Storage Appliance.



4

Share Simply

Have Fun Wherever You Are

With ZyXEL's wired and wireless network products, you can freely enjoy Web surfing and network gaming anywhere at home. Since the embedded QoS technology ensures smooth delivery of downloading, gaming, video and VoIP, the most important applications get the highest priority as you prefer.



- W** Adapter, Access Point
- D** Digital Media Adapter
- P** Powerline
- R** Router
- S** Network Storage Appliance



2

Integrate Efficiently

Organize Your Multimedia at Your Fingertips

The ZyXEL Network Storage Appliance makes it easy to access, share and enjoy music and videos from any DLNA-compatible media players. With support for multiple server technologies and a user-friendly interface, the ZyXEL Network Storage Appliance enables users to set up time-consuming tasks such as uploading/downloading and backing up files with just a few clicks.

1

Entertainment Effortlessly

Turn Living Room into Home Theater

No matter where the PC, network storage appliance, laptop and HDTV system are located, you can share all your movies, videos and digital photos easily with the ZyXEL Digital Media Adapter. The ZyXEL Powerline products, along with ZyXEL's Wireless Access Points, allow you to upgrade your current broadband network and connect all your computers and home entertainment systems through the existing electrical wiring already in the home!



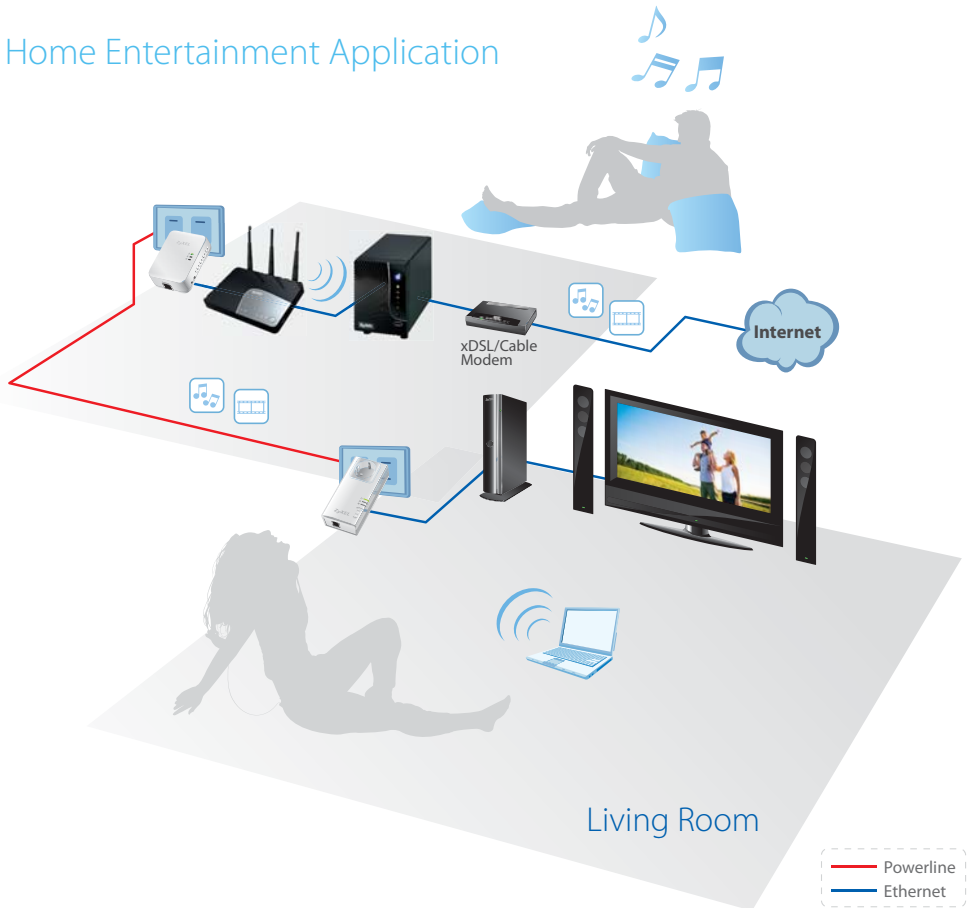
1 Entertainment Effortlessly

Turn Living Room into Home Theater

Turning a living room into a home theatre is no longer a fantasy. With the easy-to-install Powerline Ethernet Adapter, wireless routers and your existing electrical lines as the home connectivity backbone, the ZyXEL digital home entertainment solution, including media server and media player, has opened a new era of digital home entertainment. With ZyXEL's wired and wireless connectivity solutions, you can easily deploy a video network for home entertainment in a snap.

With for a wide range of file formats, the ZyXEL Digital Media Adapter ideally supplements home networks and delivers high-resolution images, movies or music from the home PC or network storage appliances to television screens or stereo systems. Users can create a home theatre that meets their own style and personal taste.

Home Entertainment Application



PLA-401
Powerline
Ethernet
Adapter



PLA-407
Powerline
Pass-Thru
Ethernet
Adapter



NBG5715
Dual-band
Wireless N
Gigabit Router



NSA221
2-Bay Media
Server



DMA-2500
Full HD Digital
Media Streamer



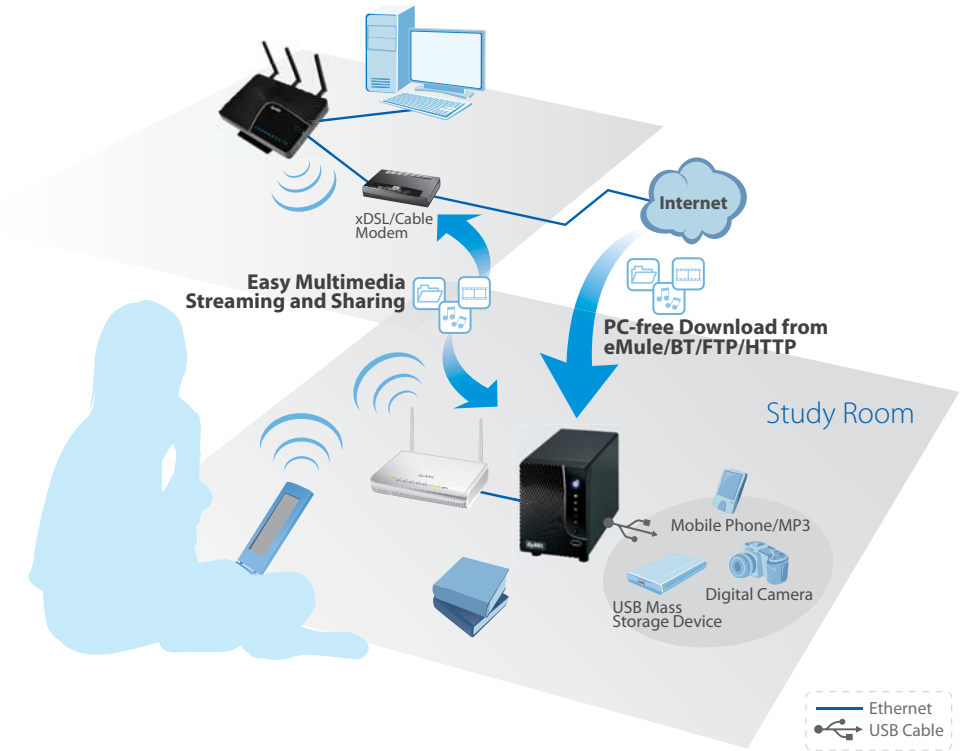
2 Integrate Efficiently

Organize Your Multimedia at Your Fingertips

Simplify data management with ZyXEL's integrated home network solution. With high performance, bandwidth management features and friendly user interface, the ZyXEL Router series can perform as smart central hubs for the home network to provide sufficient bandwidth instantly, safeguard broadband access to the Internet, allocate all devices on the network immediately and connect them to each other. Add ZyXEL Wireless Access Points, and you'll have an easily extendable home network without any hassles.

Combine ZyXEL Routers and Network Storage Appliances designed as a centralized file repository on the home network, and you can easily organize and share all the files in minutes by automatically downloading or uploading files to designated folders without the need to power on your PC. Also, the photos or videos placed on the network storage appliance can be uploaded to Flickr or YouTube automatically and shared in minutes.

Media Management Application



WAP3205
Wireless N Access Point



NBG5715
Dual-band Wireless N
Gigabit Router



NSA221
2-Bay Media Server

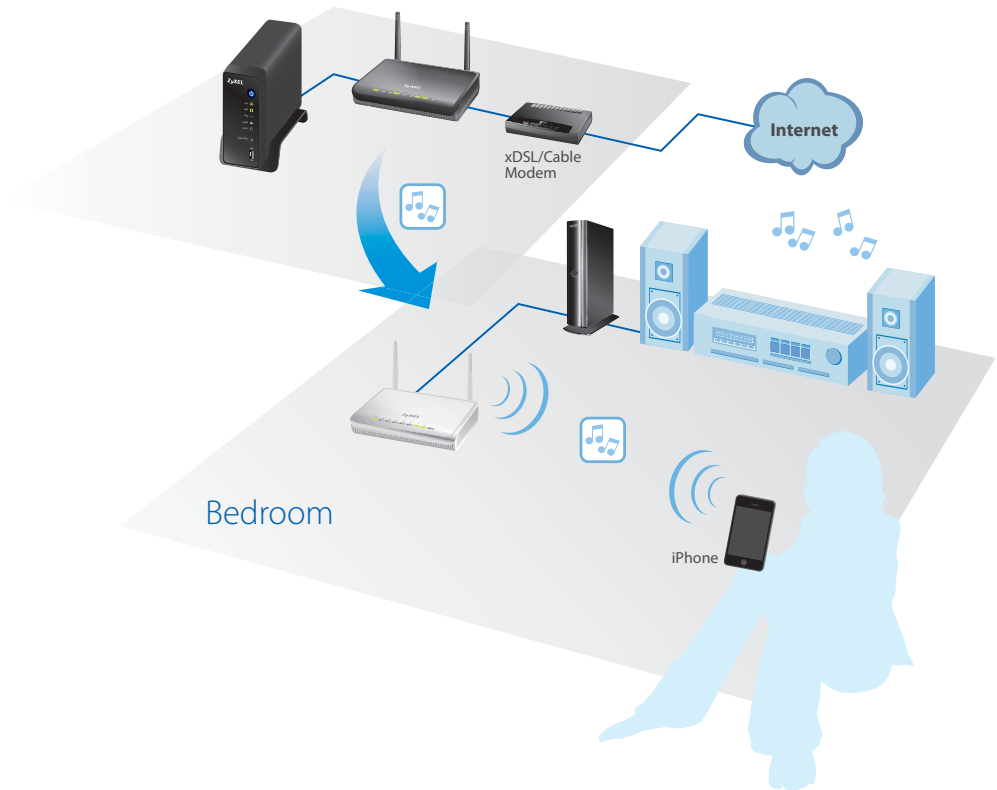


3 Relax Leisurely

Enjoy Music in Every Room

Deliver music from the box to every room! Through an DMC-capable device such as iPhone that acts as a remote control to the ZyXEL Digital Media Adapter, you can play music stored on a network storage appliance in the study room directly to the DLNA-capable stereo or TV in bedroom without even starting your PC; or just use the iPod touch as a media player to browse and playback the music stored on the ZyXEL Network Storage Appliance over the wireless home network. Connected with wired devices, the ZyXEL Wireless Access Point performs as a wireless extender to deliver high-speed broadband coverage to the entire house.

Multimedia Streaming Application



WAP3205
Wireless N
Access Point



NBG4604
Wireless N Gigabit
Managed Router



NSA210
1-Bay Digital
Media Server



DMA-2500
Full HD Digital
Media Streamer



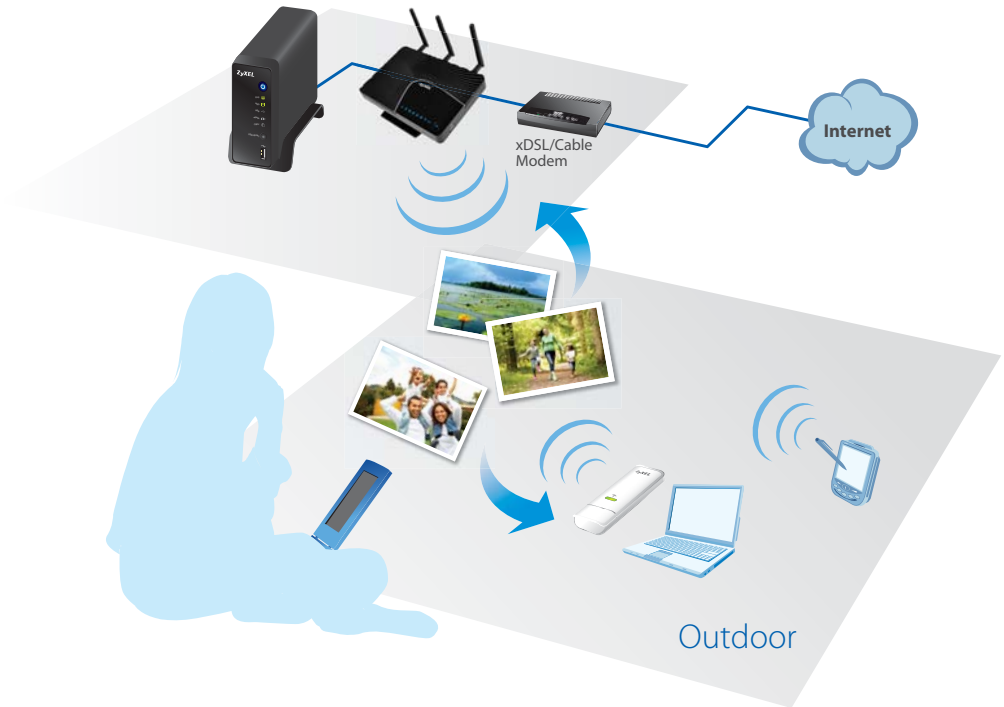
4

Share Simply

Have Fun Wherever You Are

Share with friends and family throughout the home, even on the patio! ZyXEL's wireless solution provides wide coverage and delivers the shared contents smoothly. You can easily share photos stored on your network storage appliances or PC through handheld devices such as iPod touch connected to the wireless home network. Photos and videos taken on family trips or at your children's birthday parties can be streamed immediately to outside gatherings with friends; or you can just plug a ZyXEL Wireless USB Adapter on your laptop to freely playback the music, photos and videos stored on the network storage appliances on your laptop.

Multimedia Sharing Application



NWD-211AN
Dual-band Wireless N
USB Adapter



NBG5715
Dual-band Wireless N
Gigabit Router



NSA210
1-Bay Digital
Media Server

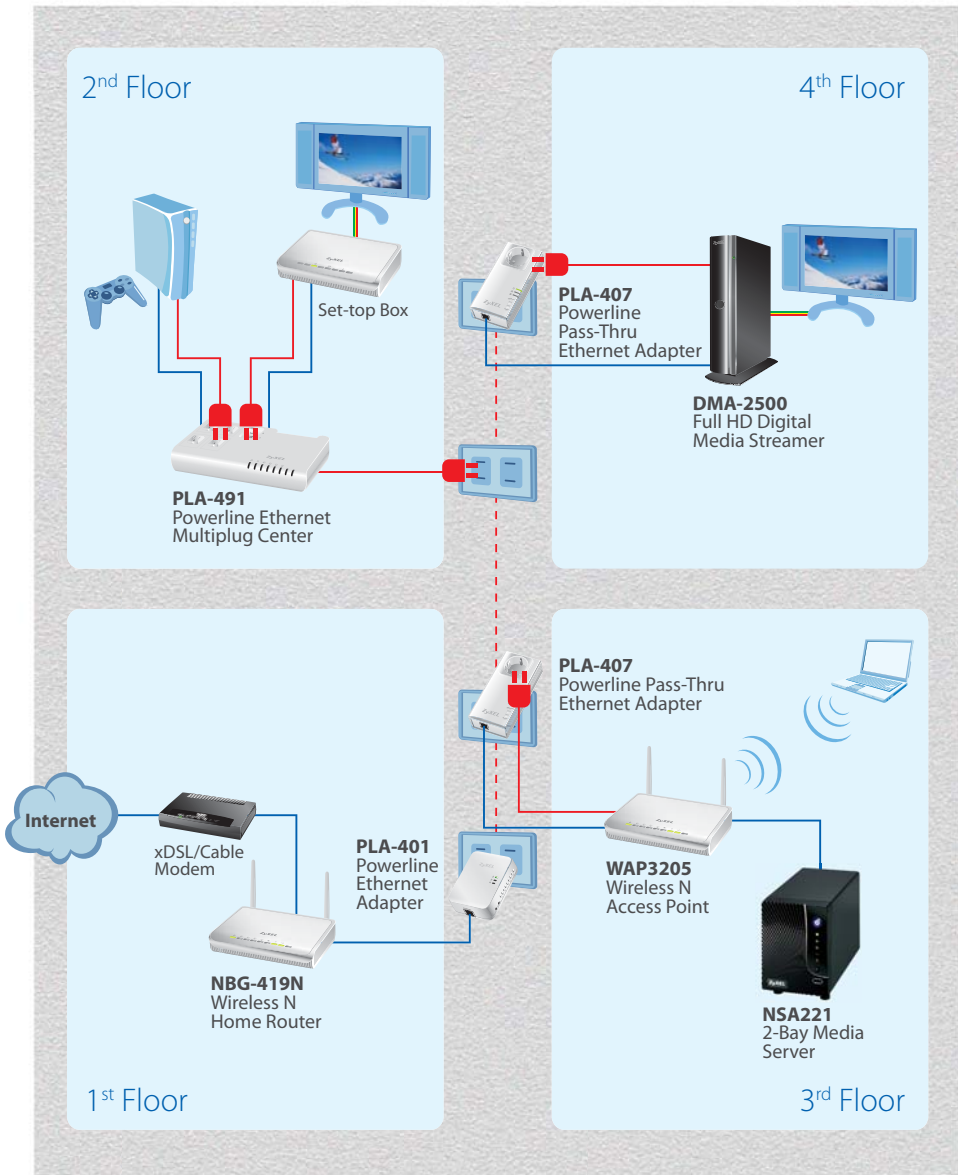


Powerline— Turn Power Line into Smart Home Network

For an easier way to build a network in a home setting with the minimum effort and cost, ZyXEL Powerline solution is your choice. In many cases, Ethernet is just not available to places where network connectivity is needed, however almost every room at home has power circuitry already installed, which can be used to connect home networked devices for various multimedia applications. It is the simple way to extend the network connection from your broadband router.

The ZyXEL Powerline series, complying with the HomePlug AV standard, provides networking environments with ubiquitous, fast, stable and safe data transmission. Moreover, ZyXEL Powerline series with green features offers energy-saving networking solution without compromising performance.

Powerline Home Network



Digital Home Product Series

Benefits of Powerline



Plug-and-Play Design

Just plug a powerline device that links to a broadband modem into the power outlet in one room, and plug another linking to a PC or any Ethernet device in the other, you can easily and instantly connect to the network without laying complicated wires.

200 Mbps



Data Transfer Rate of up to 200 Mbps

With a data transfer rate of up to 200 Mbps*, HomePlug AV, the most robust flavor of Powerline, can provide sufficient bandwidth for triple-play transmissions with full home coverage.



Green for Energy Saving

With a commitment to being “green”, ZyXEL’s new-generation Powerline Ethernet Adapters can reduce power consumption by up to 30% comparing to the previous generation of products*. Furthermore, when no Ethernet link is present, the energy-saving mode can slash power waste by up to 60% comparing to other adapters without this feature*.

**The actual saving of power consumption varies from model to model.*



QoS for Home Multimedia Streaming

The advanced QoS features built into HomePlug AV are ideal for in-house distribution of HDTV and VoIP streaming. Through prioritizing concurrent video, audio and data applications, QoS can effectively improve the transmission performance.



Easy Security Set Up

The transmission via ZyXEL’s HomePlug series is protected by 128-bit AES encryption to provide secure connections to the Internet. Just push the encryption button, and it takes only minutes to set up a secure network without complicated procedures or lengthy call to the help desk.



All-in-One Solution

The ZyXEL Powerline series provides comprehensive solutions by integrating the most needed technologies into one device. The Powerline Ethernet Adapters and Powerline Switch equipped with power outlets and noise filters to offer a high-speed network connection while supplying power to multiple electronic devices without the hassle of insufficient power outlets.

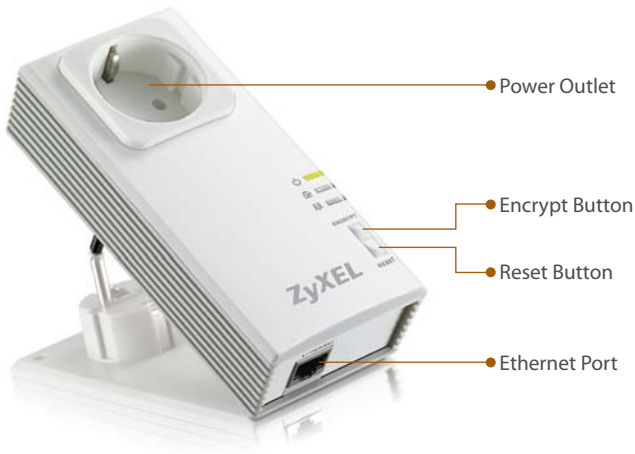


Noise Filter for Stable Network

With a built-in noise filter, the ZyXEL Powerline Ethernet Adapter can suppress noise interference level down to 1/1000 and optimize powerline communication performance. The noise filter can effectively reduce noises generated by surrounding electronic equipments such as lamps or mobile phone chargers plugged into the power outlets to ensure clean and stable signal quality on the powerline network.

PLA-407

Powerline Pass-Thru Ethernet Adapter



Powerline Ethernet Adapter with Extra Plug for Convenient HD Video Streaming

- Plug-and-play design for quick data transfer rate boost of up to 200 Mbps*
- Connects to powerline networks and provides additional power outlets
- Built-in noise filter reduces interference
- QoS enhances high-definition video streaming
- Power-saving mode reduces energy consumption
- Single encryption button provides full network security
- Multi-colored LED indicates powerline network performance

*The theoretical data transfer rate is 200 Mbps. The actual data transfer rate will vary depending on quality of electrical installation.

Digital Home Product Series

Powerline Feature Matrix

Model	NBG-318S	PLA-407	PLA-402	PLA-401
Product Picture				
Description	Super G Wireless HomePlug AV Router	Powerline Pass-Thru Ethernet Adapter	Powerline Coaxial Ethernet Adapter	Powerline Ethernet Adapter
System Overview				
Standard	HomePlug AV 802.11b/g with Super G	HomePlug AV	HomePlug AV	HomePlug AV
PHY Rate*	Up to 200 Mbps	Up to 200 Mbps	Up to 200 Mbps	Up to 200 Mbps
Wireless Speed	Up to 108 Mbps	-	-	-
Key Features				
Plug & Play Design	Desktop/ Powerline Inlet	Wall-Mount/ Direct Plug	Desktop/ Powerline Inlet	Wall-Mount/ Direct Plug
QoS	Yes	Yes	Yes	Yes
Noise Filter	-	Yes	Yes	-
Powerline Security Encryption	128-bit AES	128-bit AES	128-bit AES	128-bit AES
Wireless Security	WEP/802.1x/ WPA/WPA2	-	-	-
LED Indicators to Identify Network Performance	Yes	Yes	Yes	Yes
Power-Saving Mode	-	Yes	Yes	Yes
Hardware				
Ethernet Port	1 WAN/3 LAN Ports	1	1	1
Coaxial Port	-	-	1	-
Power Outlet	-	1	-	-
Detachable Antenna	1	-	-	-
WPS Button	Yes	-	-	-
Encryption Button	Yes	Yes	Yes	Yes
HomePlug On/Off Switch	-	-	-	-
Power On/Off Switch	-	-	-	-

* The actual data transfer rate will vary depending on quality of electrical installation.

Digital Home Product Series

Powerline Feature Matrix

PLA-400	PLA-470	PLA-491	PLA-450	PL100	PLX-111
					
Powerline Ethernet Adapter	Powerline Ethernet 4-Port Switch	Powerline Ethernet Multiplug Center	Powerline Wireless AP	Powerline Ethernet Adapter	Powerline Network Filter
HomePlug AV	HomePlug AV	HomePlug AV	HomePlug AV 802.11b/g with Super G	HomePlug Turbo	HomePlug UPA, CEPCA
Up to 200 Mbps	Up to 200 Mbps	Up to 200 Mbps	Up to 200 Mbps	Up to 85 Mbps	-
-	-	-	Up to 108 Mbps	-	-
Desktop/Powerline Inlet	Desktop/Powerline Inlet	Desktop/Powerline Inlet	Desktop/Powerline Inlet	Desktop/Powerline Inlet	Wall-Mount/Direct Plug
Yes	Yes	Yes	Yes	-	-
-	-	Yes	-	-	Yes
128-bit AES	128-bit AES	128-bit AES	128-bit AES	56-bit DES	-
-	-	-	WEP/802.1x/WPA/WPA2	-	-
Yes	Yes	Yes	Yes	-	-
-	-	-	-	-	-
1	4	4	1	1	-
-	-	-	-	-	-
-	-	4	-	-	1
-	-	-	1	-	-
-	-	-	Yes	-	-
Yes	Yes	Yes	Yes	-	-
-	-	Yes	-	-	-
-	-	Yes	-	-	-

Digital Home Product Series

Wireless Router & Client

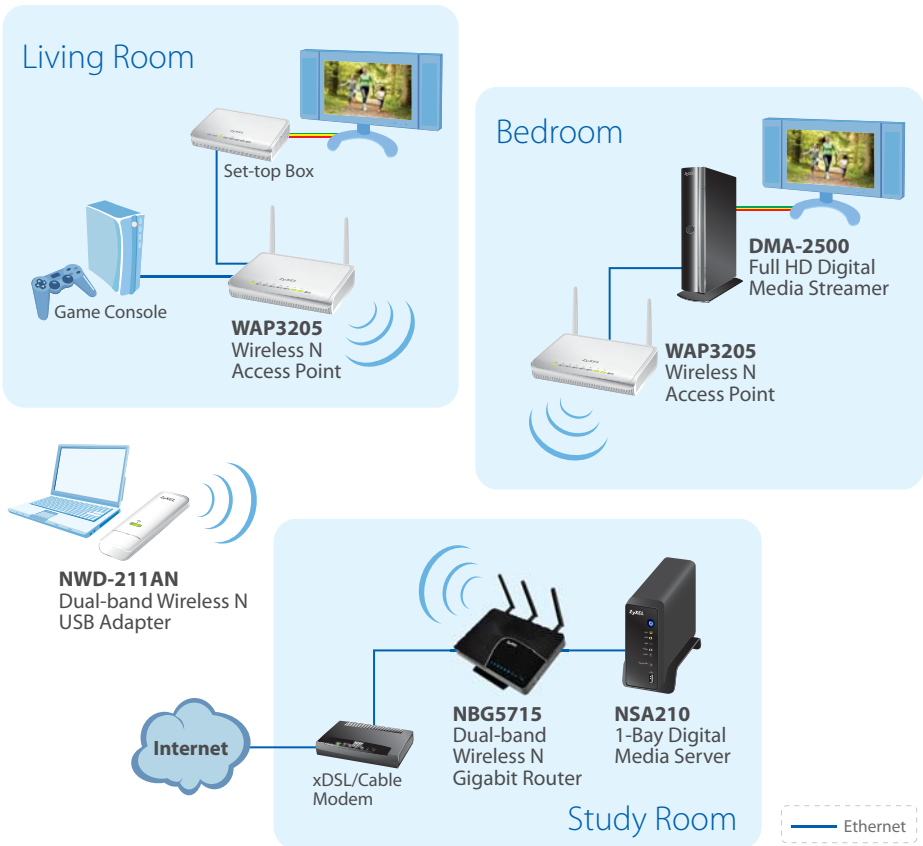


Wireless Router & Client— Easily Upgrade Wireless Connectivity for Multimedia Streaming

To elevate your real-time enjoyment of multimedia applications, the combination of a high-performance router and advanced wireless adapters make an efficient solution for setting up a network in minutes without complicated wiring. In order to fulfill the increasing demand for high-quality multimedia streaming, ZyXEL's complete 802.11n series can boost wireless data transfer rate of up to 450 Mbps*. Through the friendly user interface of the ZyXEL Router series, users can simply configure network devices according to their usage patterns.

Besides performing as home network centralized hub, ZyXEL Routers can share and utilize network resources efficiently. Equipped with USB ports, the ZyXEL Router can not only share the 3/3.5G wireless network anywhere within the cellular signal coverage, but also let users share all USB-equipped network devices as printers on the home network.

Wireless Home Network



**The wireless data transfer rate is the theoretical data transfer rate. The actual data transfer rate will vary depending on the network environment.*

Digital Home Product Series

Benefits of Wireless Router & Client



Friendly User Interface

With a user-friendly interface, ZyXEL Routers provide an "Easy Mode" for navigating functions, basic setup tasks and displaying a comprehensive network map. With the Easy Mode that simplifies system configuration tasks, you can enable or disable frequently used options such as Game Engine, Power Saving, Content Filtering or Bandwidth MGMT. Just click the On/Off icon to enable the Game Engine function and give gaming traffics the highest priority to ensure smooth gaming



Network map shows you devices on your home network

experience for Xbox 360, PlayStation, Battle.net or MSN Game Zone. If you are not that into games, just click the Bandwidth MGMT icon for easy setups to prioritize network applications. Simple drag and drop of the network application icons is all it takes to adjust the priority. For advanced setup, "Expert Mode" provides full setup options for more detailed configuration.



Easily configure the wireless schedule

Just One Click for Easy Setup

Give the gaming application transmission the highest priority

Make your own URL blocking list

Enable firewall to protect your computer

Through the Easy Mode interface, users can easily drag and drop the network application icons to prioritize traffic.

Enable and disable common-use features with a simple click

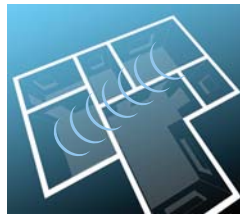


Video Enjoyment in Every Room

Lags in video streaming are now history. In the past, the WMM QoS features could only prioritize the transmission of time-sensitive applications without guaranteeing the video streaming quality, which depends on the stability of bandwidth and coverage. Supported by ZyXEL's new-generation wireless N router, the latest QoS technology extends the coverage to the entire home and enhances bandwidth stability as well as the video streaming quality. No matter where you are at home, it provides an optimized visual experience for you to enjoy high-quality video streaming over wireless home network.



Past:
The quality of video streaming could become unstable due to physical blockades and long distance from the access points.

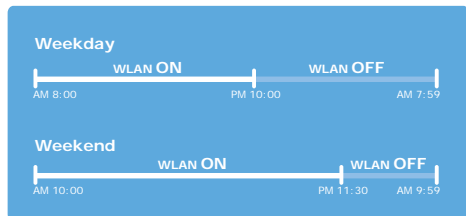


Current:
The enhanced QoS function allows you to enjoy stable and quality video streaming anywhere at home.



Green Router Saves Energy

In order to save power and reduce wireless radiation when the wireless network is not in use, ZyXEL Router series features a wireless scheduler. Users can configure the router to turn on/off automatically according to the wireless usage pattern; or the user can just push the wireless on/off switch to save energy.*



Users can easily set up the wireless schedule based on their usage pattern

**This feature is available on select models only*



Secure Home Network

The data security technology employed by ZyXEL makes it easy to allow authorized users to access the network, as well as to protect data from being tapped during transmissions. Users just push a WPS button on the router and the other on the client; both devices will find each other and automatically complete the security configuration.

Digital Home Product Series

Wireless Router Product Spotlight



NBG5715

Dual-band Wireless N Gigabit Router



Ultimate Visual Experiences over Whole-Home Media Streaming

- 802.11n certified, dual mode (2.4 GHz or 5 GHz) for ideal media streaming environment
- Friendly user interface for fast function navigation and setup
- Gigabit Ethernet ports bring the faster wired speed
- Advanced QoS optimizes visual experiences for video streaming within the whole-home wireless coverage
- Two USB ports for printers and 3G dongles support
- Two IPSec VPN tunnels for secure data transfer between home networks and remote sites
- Multiple SSID for separating access privileges (secured and guest)



NBG4115

Wireless N-lite 3G Router



Optimizes Network Mobility

- 802.11n support with data transfer rates of up to 150 Mbps*
- One USB port for 3G/3.5G dongles as WAN connection backup
- Configurable QoS ensures smooth delivery of user's most important activities per the priority user set
- Eco-friendly wireless scheduling for energy saving
- WPS button provides secure data transmission with simple security setup

* The wireless data transfer rate is the theoretical data transfer rate. The actual data transfer rate will vary depending on the network environment.



NBG4604

Wireless N Gigabit Managed Router



Extreme Wireless Performance and Dead Spot-Free Coverage

- 802.11n certified with data transfer rates of up to 300 Mbps*
- Gigabit Ethernet ports provide the faster wired connection
- TR-069 supports auto-configuration and provisioning
- SNMP support for monitoring device status
- Multiple SSID for separating access privileges (secured and guest)
- QoS for effective multimedia bandwidth allocation
- Eco-friendly wireless scheduling saves energy



WAP3205

Wireless N Access Point



Upgrade Wireless Speed and Extend Network Coverage

- 802.11n compliant, data transfer rate of up to 300 Mbps*
- Easy to extend the wireless network coverage
- 5-in-1 operation modes: access point, WLAN Client, WLAN bridge, WDS repeater, and universal repeater
- Multiple SSID for separating access privileges (secured and guest)
- WPS button for quick and easy wireless security setup
- Secure wireless communications with WEP/WPA/WPA2

Digital Home Product Series

Wireless Router Feature Matrix

Model	NBG5715	NBG4604	NBG-460N	NBG-419N
Product Picture				
Description	Dual-band Wireless N Gigabit Router	Wireless N Gigabit Managed Router	Wireless N Gigabit Router with VPN	Wireless N Home Router
WLAN Feature				
Wireless Data Transfer Rate*	450 Mbps	300 Mbps	300 Mbps	300 Mbps
Wi-Fi Standard	802.11a/b/g/n 	802.11b/g/n 	802.11b/g/n 	802.11b/g/n 
WMM QoS	Enhanced QoS for whole-home wireless video streaming network	Yes	Yes	Yes
Wireless Scheduler	Yes	Yes	Yes	Yes
Output Power Management	Yes	Yes	-	Yes
WEP/WPA/WPA2	Yes	Yes	Yes	Yes
Powerline Feature				
Powerline Data Transfer Rate*	-	-	-	-
Standard	-	-	-	-
Hardware				
WAN/LAN Ports	1/4 (Gigabit)	1/4 (Gigabit)	1/4 (Gigabit)	1/4
USB Port	2	-	-	-
Detachable Antenna	3	2	3	2
WPS Button	Yes	Yes	Yes	Yes
Wireless On/Off Switch	Yes	-	-	Yes
Other Buttons	Power On/Off Switch	-	-	-
System Features				
Access Point Mode	Yes	Yes	Yes	Yes
NAT	Yes	Yes	Yes	Yes
DHCP Client/Server	Yes	Yes	Yes	Yes
Static DHCP, PPPoE, PPTP	Yes	Yes	Yes	Yes
IGMP v1/v2	Yes	Yes	Yes	Yes
SPI/DoS Firewall Security	Yes	Yes	Yes	Yes
IPSec VPN	2	-	2	-
QoS Type	Port-based QoS	Port-based QoS	MBM v2	Port-based QoS
Windows 7 Certified	Yes	Yes	-	Yes
Work with Vista	Yes	Yes	Yes	Yes
Works Best With	NWD-211AN NWD-310N	NWD-211AN NWD-310N	NWD-211AN NWD-310N	NWD-271N NWD-310N

* The data transfer rate is the theoretical maximum data transfer rate. The actual data transfer rate will vary depending on the network environment.

Digital Home Product Series

Wireless Router Feature Matrix

NBG-417N	NBG4115	NBG-318S	NBG-334W	P-334
				
Wireless N-lite Home Router	Wireless N-lite 3G Router	Super G Wireless HomePlug AV Router	802.11g Wireless Firewall Router	Broadband Firewall Router
150 Mbps	150 Mbps	108 Mbps	54 Mbps	-
802.11b/g	802.11b/g	802.11b/g with Super G	802.11b/g	-
				-
Yes	Yes	Yes	Yes	-
Yes	Yes	-	-	-
Yes	Yes	-	-	-
Yes	Yes	Yes	Yes	-
-	-	200 Mbps	-	-
-	-	HomePlug AV	-	-
1/4	1/2	1/3	1/4	1/4
-	1	-	-	-
1	1	1	1	-
Yes	Yes	Yes	Yes	-
-	-	-	-	-
-	-	HomePlug Encryption Button	-	-
Yes	Yes	Yes	Yes	-
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
-	-	-	-	2
Port-based QoS	Port-based QoS	MBM v2	MBM v2	MBM
Yes	Yes	-	-	-
Yes	Yes	Yes	Yes	-
NWD-270N	NWD-270N 3G USB Dongle	G-202, G-302 v3 PLA-400 Series	G-202 G-302 v3	-

Digital Home Product Series















Wireless AP Feature Matrix

Model	WAP3205	G-570S v2
Product Picture		
Description	Wireless N Access Point	802.11g Wireless Access Point
WLAN Features		
Wireless Data Transfer Rate*	300 Mbps	108 Mbps
Wi-Fi Standard	802.11b/g/n	802.11b/g with Super G
		
Wireless Scheduler	Yes	-
Output Power Management	Yes	Yes
802.1e/WMM QoS	Yes	-
WEP/WPA/WPA2	Yes	Yes
Hardware		
10/100 Mbps Ethernet Ports	2	1
Detachable Antenna	2	1
WPS Button	Yes	-
Reset Button	Yes	Yes
System Features		
Operation Mode		
AP Mode	Yes	Yes
Client Mode	Yes	Yes
Bridge Mode	Yes	Yes
WDS Repeater	Yes	Yes
Universal Repeater	Yes	-
Multiple SSID	Yes	-
MAC Filtering	Yes	Yes
IGMP Snooping	Yes	-
802.1x	-	Yes
DHCP Client	Yes	Yes
Works Best with	Router: NBG5715, NBG-419N Client: NWD-211AN, NWD-310N	Router: NBG-318S, NBG-334W Client: G-202, G-302 v3

* The data transfer rate is the theoretical maximum data transfer rate. The actual data transfer rate will vary depending on the network environment.

Digital Home Product Series

Wireless Client Feature Matrix

Model	NWD-211AN	NWD-271N	NWD-270N	AG-220	G-202	NWD-310N	G-302 v3
Product Picture							
Description	Dual-band Wireless N USB Adapter	Wireless N USB Adapter	Wireless N-lite USB Adapter	Wireless USB Adapter	Wireless 11g USB Adapter	Wireless N PCI Adapter	Wireless 11g PCI Adapter
WLAN Features							
Wireless Data Transfer Rate*	300 Mbps	Transmit: 150 Mbps Receive: 300 Mbps	150 Mbps	54 Mbps	54 Mbps	300 Mbps	54 Mbps
Wi-Fi Standard	802.11a/b/g/n 	802.11b/g/n 	802.11b/g 	802.11a/b/g 	802.11b/g 	802.11b/g/n 	802.11b/g 
Dual-band Support	Yes	-	-	Yes	-	-	-
WMM QoS	Yes	Yes	Yes	Yes	Yes	Yes	-
WEP/WPA/WPA2**	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soft AP***	Yes	-	Yes	Yes	Yes	-	-
Hardware							
WPS Button	Yes	Yes	Yes	-	-	Yes	-
OS Support	Windows XP/Vista/7 Mac OS 10.3/10.4/10.5	Windows XP/Vista/7 Mac OS 10.4/10.5	Windows XP/Vista/7 Mac OS 10.3/10.4/10.5	Windows XP/Vista	Windows XP/Vista/7 Mac OS 10.4	Windows XP/Vista/7 Linux (Kernel 2.4/2.6)	Windows XP/Vista/7

* The data transfer rate is the theoretical maximum data transfer rate. The actual data transfer rate will vary depending on the network environment.

** Per 802.11n specification, WEP and TKIP encryption doesn't operate under 802.11n mode.

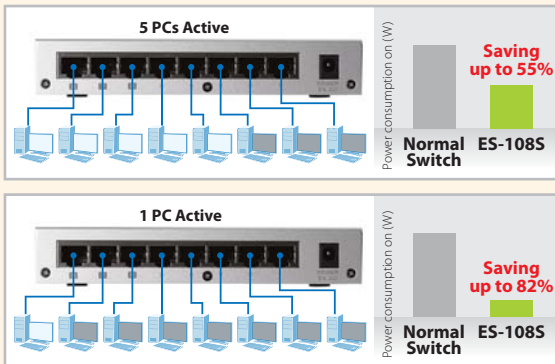
***Soft AP feature of AG-220 and G-202 doesn't support on Windows Vista.



Desktop Switch— Plug-and-play for Home Network Setup

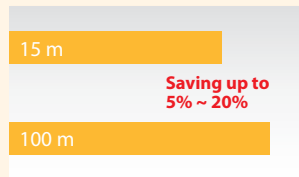
With plug-and-play design, the ZyXEL Desktop Ethernet Switches make it easy to connect network devices such as PCs, network storages and print servers to your home network. And the “green” solutions allow all ZyXEL Desktop Ethernet Switches to provide power-saving benefits without compromising performance by automatically reducing power usage when a shut down network device or inactive link is detected. In addition, they automatically detect the length of connected Ethernet cables and adjust power usage accordingly. The shorter the Ethernet cable length, the less power it consumes.

Reduce Power Usage When Link Inactive



**The power consumption saving for each model varies with the actual number of active connected devices and the cable length.*

Energy Savings by Detecting Cable Length










■ Power Consumption



Digital Home Product Series

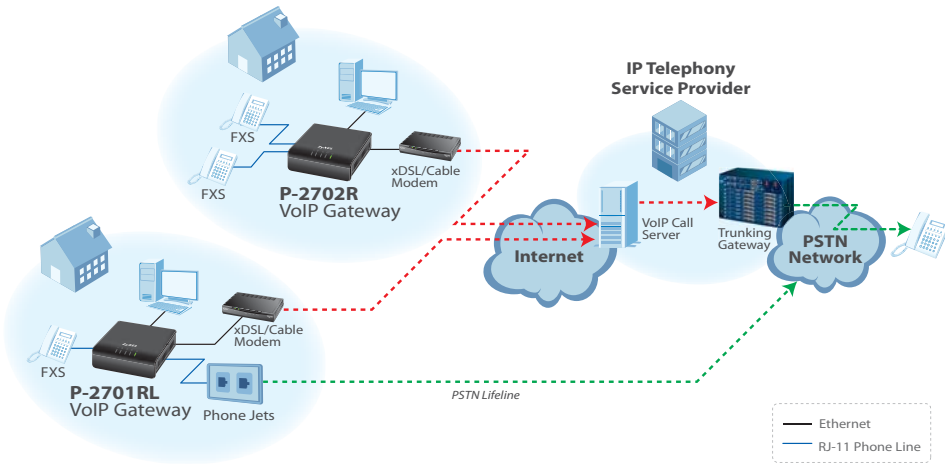
Desktop Switch Feature Matrix

Model	GS-105B	GS-108B	ES-105A	ES-108A	ES-108P	ES-105S	ES-108S
Product Picture							
Description	5-Port Desktop Gigabit Ethernet Switch	8-Port Desktop Gigabit Ethernet Switch	5-Port Desktop Fast Ethernet Switch	8-Port Desktop Fast Ethernet Switch	8-Port Desktop Fast Ethernet Switch with Internal Power	5-Port Desktop Fast Ethernet Switch	8-Port Desktop Fast Ethernet Switch
Case	Metal	Metal	Metal	Metal	Metal	Plastic	Plastic
Green Feature							
Power Saving by Detecting Link Status	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power Saving by Cable Length	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Port Density & Key Features							
10/100 Mbps Ethernet Ports	-	-	5	8	8	5	8
10/100/1000 Mbps Ethernet Ports	5	8	-	-	-	-	-
QoS Ports	-	-	2	3	-	-	-
Auto MDI/MDI-X	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Store and forward	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Full Duplex Capability	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Flow Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Performance							
Switching Capacity	10 Gbps	16 Gbps	1.0 Gbps	1.6 Gbps	1.6 Gbps	1.0 Gbps	1.6Gbps
Mac Address	1K	4K	2K	1K	1K	2K	1K
Memory Buffer	104 KB	128 KB	48 KB	96 KB	96 KB	48 KB	96 KB
Jumbo Frames	Up to 9 KB	Up to 9 KB	-	-	-	-	-
Power Consumption	3.15 W (Max)	6.48 W (Max)	2.25 W (Max)	2.40 W (Max)	2.34 W (Max)	2.25 W (Max)	2.20 W (Max)



VoIP Gateway— Integrating Voice & Data Networks

Designed for SOHO and home users, ZyXEL's VoIP Gateway offers crystal-clear voice quality and rich call feature set to fulfill users' VoIP needs. By simply plugging the Ethernet cable into the VoIP gateway and connecting the device to a regular phone, users can easily take advantage of subscribed VoIP services such as caller ID, call waiting, call hold/resume, call transfer, call forward, 3-way conference and lifeline. In addition, ZyXEL VoIP provides various voice codecs support, including G.711, G.723.1, G.726, G.729A/B and iLBC, to ensure audio transmission quality.



Model	P-2701RL	P-2702R
Product Picture		
Hardware		
10/100 Mbps WAN Port	1	1
10/100 Mbps LAN Port	1	1
FXO/FXS Port	1/1	0/2
Media Processing		
Codec	G.711, G723.1, G.726, G729A/B, iLBC	G.711, G723.1, G.726, G729A/B, iLBC
Fax	T.38, G.711 pass through	T.38, G.711 pass through
G.168	Yes	Yes
Voice Activity Detection	Yes	Yes
Comfort Noise Generation	Yes	Yes
Telephony Features		
Call Features	Yes	Yes
3-Way Conferencing	Yes	Yes
Dialing Plan	Yes	Yes
Caller ID	Yes	Yes
MWI	Yes	Yes
Polarity Reversal	Yes	Yes
DTMF	Yes	Yes
Auto-Provision	HTTP, FTP, TFTP	HTTP, FTP, TFTP
NAT/Firewall	Yes	Yes
Wizard Support	Yes	Yes

Digital Home Product Series

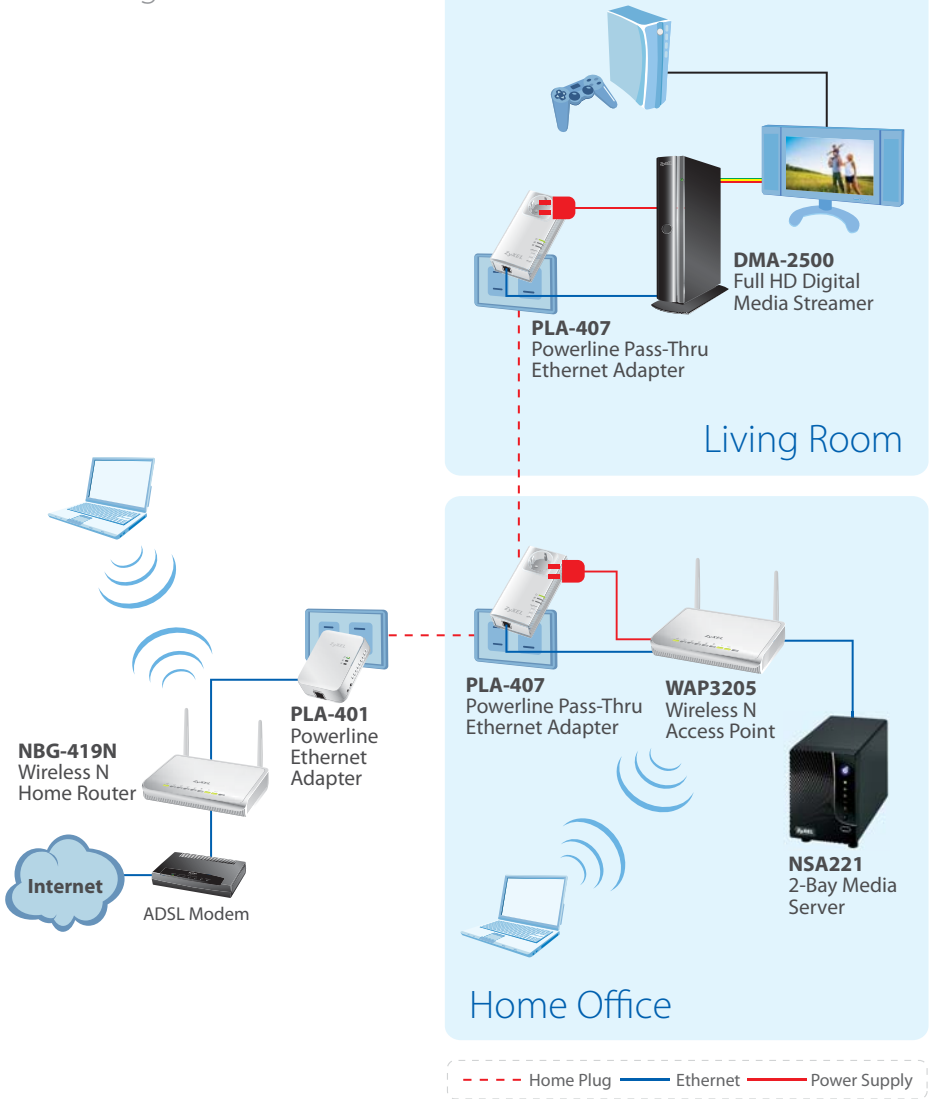
Storage & Digital Media Adapter



Storage & Digital Media Adapter— Enjoy Digital Entertainment Freely

The ZyXEL home entertainment solution consisting of storage and digital media adapters can bring you enjoyable and reliable digital home entertainment anywhere in the house through the home network. No matter where you are in the house, you can easily store high-resolution photos, videos, music and other media files on the digital media server and enjoy these files on HDTV or stereo system through digital media streamer without even powering up the PC. Users can also easily access the photos or videos on the road with an iPod touch. ZyXEL's digital home entertainment solution enhances the flexibility and mobility of home entertainment.

Home Entertainment Networking



Digital Home Product Series

Benefits of Storage



DLNA 1.5-Certified Media Server and Player

With DLNA-certified digital media adapter and storage, you can play digital media collections through DLNA-capable clients at home such as HDTV, mobile devices or audio-video system to enjoy music, photos and videos anywhere without complicated installations or setup.



Intuitive User Interface

Users can easily manage the photos, videos and music through the user interface that offers graphical icons instead of the command lines. Users can also quickly preview the files through thumbnails and play them with the media player.

Its advanced zPilot file auto-classification function brings users more convenience: users can just drag the music, photo and videos files to the shortcut on the desktop, and the files will be automatically stored and classified to the designated folders created on ZyXEL Network Storage Appliance.





Easy Multimedia Streaming

ZyXEL Digital Media Adapter supports media files in a wide range of music, photo and video formats. You can access digital contents stored on a network storage appliance in your living room without the effort of converting file formats, or enjoy films with resolution of up to 1080p on a HDTV with title support. With built-in access to Internet radio, YouTube and WebTV, the digital media adapter also provides a convenient way to enjoy real-time online videos and music.



Powerful Auto Downloading/Uploading to Free up Your PC

The ZyXEL Network Storage Appliance supports automatically downloading without powering up the PC. Users can simply click to setup the storage to run eMule, BitTorrent, FTP or HTTP downloading or uploading files to flickr, YouTube and FTP server automatically. This is particularly useful for large and lengthy downloading or uploading and it's also efficient to save considerable power.

Runs downloads independent of PC



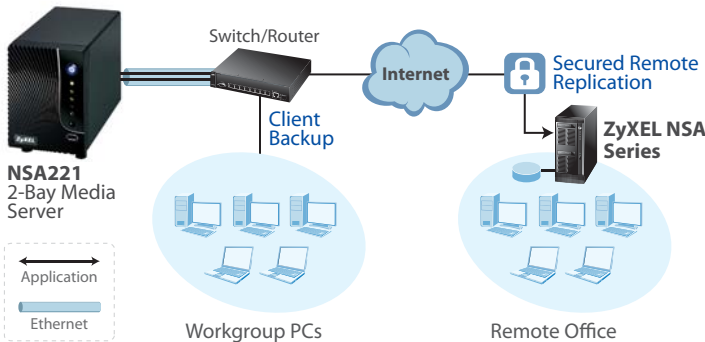
Auto-upload photos and videos





Complete Instant/Scheduled Backup Solutions

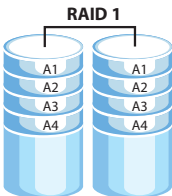
The “Backup Planner” enables an instant/scheduled backup solution so users can easily backup data from one ZyXEL storage product to another ZyXEL storage device using encrypted remote replication.



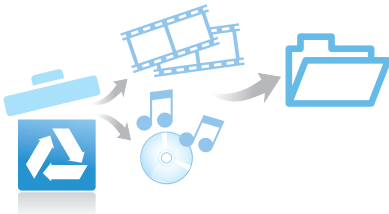
The intelligent “Copy/Sync” button helps easily copy from/to external USB storage device, card readers, and digital cameras.



The SATA disk in NSA210 can work with eSATA hard disk to build up RAID1 mirroring environment to enhanced data protection.



With networked Recycle Bin support, accidentally deleted data can also be quickly restored.





NSA221 2-Bay Media Server



Centralized Media Server for Convenient Multimedia Streaming

- 2-Bay digital media server with capacity of up to 4 TB
- DLNA 1.5-certified server compatible with a wide range of media devices for easy multimedia streaming
- Intuitive user interface with integrated media player for click-and-play
- Easy to install users' preferred applications by few clicks through Package management
- zPilot file auto-classification function makes file management easier and faster
- Online firmware upgrade with auto-notification
- Runs eMule/BitTorrent/FTP/HTTP downloads independent of PC
- Supports iTunes server, SqueezeCenter and photo album servers for music/photo/streaming and sharing
- All-in-one backup solution to protect users' valuable data
- Green NSA with scheduling and hard disk hibernation for energy savings



DMA-2500 Full-HD Digital Media Streamer






Stream Full High-Definition Multimedia at Home

- Streams 1080p high-definition videos from networked storage to HDTV
- DLNA 1.5-certified digital media streamer enhances media sharing experience
- More media formats and subtitles for hassle-free enjoyment
- Built-in DRM-ND enables playback of encrypted digital contents
- Built-in access to Web TV, YouTube and Internet Radio Live365
- Compatible with ZyXEL wireless N USB adapters for networking flexibility
- Compact design & friendly user interface


Storage & Digital Media Adapter

Storage Feature Matrix

Model	NSA221	NSA-220 Plus	NSA210
Product Picture	<div></div>	<div></div>	<div></div>
Description	2-Bay Media Server	Central Digital Media Library	1-Bay Digital Media Server
Intuitive User Interface			
Intuitive User Interface	Yes	-	-
File Auto-classification	Yes	-	-
Media Player	Yes	-	-
Physical Specification			
Support Internal 3.5" SATA II	2	2	1
Max. Hard Disk Capacity Support	4 TB	4 TB	2 TB
Interface	3 USB Ports	2 USB Ports	2 USB Ports, 1 eSATA Port
Gigabit LAN Port	1	1	1
Kensington® Lock Security Hole	Yes	-	Yes
Reset Button	Yes	Yes	Yes
One-touch Copy/Sync Button	Yes	Yes	Yes
Network Applications			
Media Server	- UPnP AV Server with DLNA 1.5 Certified - iTunes Server, SqueezeCenter Support		
Web Server	- PHP/MySQL/PHP My Admin Support - Photo Album and Blog Server		
Download/Upload			
Download Support	- eMule/BT/FTP/HTTP Download - SMB/FTP Server		
Upload Support	- Auto-Upload Photos/Videos to flickr/YouTube - Auto-Upload Files to FTP Server		
Backup			
PC v.s NAS	Yes	Yes	Yes
NAS vs. NAS with Encrypted Remote Repliacation	Yes	Yes	Yes
Instant/Schedule Backup	Yes	Yes	Yes
RAID 0, RAID 1	Yes	Yes	-
Networking			
Networking Protocols	- CIFS/SMB, NFS, FTP/HTTP - DHCP Client, PPPoE - NTP		
Networking Setting	DyDNS Support		
Security			
IP Filter Table Management	Yes	Yes	Yes
HTTPS/FTPES (FTP over explicit TLS/SSL)	Yes	Yes	Yes
System Management			
Online Firmware Upgrade	Yes	Yes	-
User/Group Management	Yes	Yes	Yes
Hard Disk Failure Detection (S.M.A.R.T.)	Yes	Yes	Yes
Green Features			
Schedule Power On/Off	Yes	Yes	Yes
Internal HDD Hibernation	Yes	Yes	Yes
External HDD Hibernation (eSATA)	-	-	Yes

Storage & Digital Media Adapter

Digital Media Adapter Feature Matrix

Model	DMA-2500
Product Picture	
Description	Full HD Digital Media Streamer
Hardware Specification	
A/V Output	HDMI 1.1, CVBS, S-Video/Component, SPDIF (Coaxial)
10/100 Mbps LAN Port	1
USB Port	1 (for storage or 802.11n USB dongle)
Remote Control	1
Media Player Features	
Support YouTube, Internet Radio, and WebTV	
Support (BGM) Background Music to Allow Viewing Photos and Listening to Music Simultaneously	
View Photos in Thumbnails Mode/Slideshow	
Media Formats and Subtitles Support	
Video	MPEG1/2/4 Elementary (M1V, M2V, M4V) MPEG1/2 PS (M2P, MPG) MPEG2 Transport Stream (TS, TP, TRP, M2T, M2TS, MTS) VOB AVI, ASF, WMV Matroska (MKV) MOV (H.264), MP4, ISO, IFO
DRM	WMDRM-10nd
Audio	WMA, MP3, AAC 4, WAV, OGG, DTS-pass through, FLAC ,AC3, WMA Pro, LPCM, Vorbis, MP1, MP2, MP3
Photo	JPEG, BMP, PNG, TIFF, GIF
Subtitle	SRT, SUB (idx), SSA, ASS

Eco-Friendly. We Do More.



Powered by ENERGY STAR® Qualified Adapter

Powered by adapters with ENERGY STAR® qualification, the ZyXEL products bring users not only comprehensive digital home solutions, but also benefits of savings on power consumption.



Wireless Scheduling

In order to save power and reduce wireless radiation when the wireless network is not in use, the Wi-Fi device can be configured to turn on or off automatically according to user's wireless usage pattern.



Power On/Off Scheduling

The eco-friendly scheduling functions of ZyXEL's Network Storage Appliances can automatically perform power management tasks according to specific date/time settings for better power efficiency. Based on the user's usage patterns, the ZyXEL Network Storage Appliances can automatically turn on or off to conserve power and operating costs.



Smart Fan Control

With smart fan technology, the fans in ZyXEL's Network Storage Appliances can run at slower speeds to reduce power consumption when the system temperature is low.





Power-Saving Mode Consumes Less

The new-generation ZyXEL Powerline series features a power-saving mode that reduces power consumption when the Ethernet links become inactive.



Power Usage Adjustment by Link Status

The ZyXEL Switch series can automatically reduce power usage when any shut down network device or inactive link is detected; in other words, power consumption of the series can be adjusted according to the number of active network devices.



Saving Energy by Detecting Cable Length

The ZyXEL Switch series can automatically detect the length of connected Ethernet cables and adjust power usage accordingly. The shorter the cable length, the less power it consumes.



Six-level Wireless Output Management

With the six-level wireless output controlling capability, the ZyXEL Router series make it easy to adjust the output power for whole-home wireless coverage according to actual needs. The feature eliminates unnecessary power consumption and reduces interference caused by neighboring access points within an area of high-density wireless deployment.



Wireless On/Off Switch

The users can easily control wireless access and save energy with the wireless on/off switch on the rear panel of the ZyXEL routers to toggle the wireless access in just seconds.

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